#### B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General site information. Please provide the following information about the site: a) Name of facility/site: Facility/site address: Getty Station #30317 Location of facility/site: Facility SIC code(s): Street: longitude: latitude: 1744 Centre Street 710 09' 01"W 420 17' 14"N b) Name of facility/site owner: Getty Petroleum Marketing, Inc. Town: West Roxbury Email address of owner: Zip: State: County: MA 02132 Telephone no. of facility/site owner: (516) 542-4900 Fax no. of facility/site owner: Owner is (check one): 1. Federal 2. State/Tribal 3. Private ✓ 4. other, if so, describe: Address of **owner** (if different from site): Street: 1500 Hempstead Turnpike Town: East Meadow State: NY Zip: 11554 County: Operator telephone no: (508) 871-8300 c) Legal name of operator: Tyree Organization, Ltd. Operator fax no.: (508) 871-8301 Operator email: bemery@tyreeorg.com Operator contact name and title: Steve Hebenstreit, Senior Technician

Street: 9 Otis Street								
State: MA	Zip: 01581	County:						
the discharge? Y	es No 🗸 if "ves." date a	nd tracking #: permitting? Yes ✓ No						
e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes ✓ No								
ischarge, (attachi	ng additional sheets as needed)	including:						
a) Describe the discharge activities for which the owner/applicant is seeking coverage:  Excavation de-watering activities for the purpose of installing underground storage tanks at a gasoline service station.								
b) Provide the following information about each discharge:  1) Number of discharge points:  2) What is the <b>maximum</b> and <b>average flow rate</b> of discharge (in cubic feet per second, ft³/s)? Max. flow 0.11  Average flow 0.04 Is maximum flow a <b>design value</b> ? Y N ✓  For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.								
	State: MA  State: MA	State: MA  Zip: 01581  se? Yes No _ ✓, if "yes," number: the discharge? Yes No _ ✓, if "yes," date a No contingency Plan (MCP) and exempt from state 1. multi-sector storm water go 2. phase I or II construction s if Y, number: 3. individual NPDES permit? 4. any other water quality relations and storage tanks at a gasoline service state terage flow rate of discharge (in cubic feet per seximum flow a design value? Y N _ ✓ its and appropriate notation if this value is a design value lat ; pt.2: long lat.						

4) If hydrostatic testing, total volume of the discharge (gals): N/A	5) Is the discharge intermittent vor seasonal? Is discharge ongoing Yes No v?						
c) Expected dates of discharge (mm/dd/yy): start_03/13/06	end03/17/06						
d) Please attach a line drawing or flow schematic showing water flow through the facility including:  1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).							

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for all of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is believed present or believed absent in the potential

discharge. Attach additional sheets as needed.

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample	Analytical Method	Minimum Level (ML) of	Maximum daily	value	Avg. daily value	
			(1 min- imum)	(e.g., grab)	Used (method #)	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
1. Total Suspended Solids		✓	1	grab (g)	160.2	4.58ppm	0.032	1.16	0.032	1.16
2. Total Residual Chlorine	<b>√</b>	,	1	g	Total	0	***			,
3. Total Petroleum Hydrocarbons		✓	1	g	1664	3.05ppm	0.004	0.151	0.00415	0.151
4. Cyanide	✓		1	g	335.2	0.01ppm		<u> </u>		
5. Benzene		✓	1	g	8260B	12ppb	4950	0.180	4950	0.180
6. Toluene		<b>√</b>	1	g	624	280ppb	39900	1.452	39900	1.452
7. Ethylbenzene		<b>√</b>	1	g	624	36ррь	3660	0.147	3660	0.147
8. (m,p,o) Xylenes	i	1	1	g	624	61ppb	26140	0.951	26140	0.951
9. Total BTEX4		✓	1	g	624	389ppb	74650	2.717	74650	2.717

<sup>&</sup>lt;sup>4</sup>BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method	Minimum Level (ML) of	Maximum daily	value	Avg. daily valu	e
		,	(1 min- imum)	grab)	Used (method #)	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide (1,2- Dibromo-methane)										
11. Methyl-tert-Butyl Ether (MtBE)		✓	1	g	8260B	75ppb	19200	0.699	19200	0.699
12. tert-Butyl Alcohol (TBA)		✓	1	g	8260B	251ppb	3330	0.121	3330	0.121
13. tert-Amyl Methyl Ether (TAME)		✓	1	g	8260B	13ррь	82.7	0.003	82.7	0.003
14. Naphthalene		✓	1	g	8260B	17ppb	417	0.152	417	0.152
15. Carbon Tetra- chloride	1	3	1	g	8260B	8.10ppb				
16. 1,4 Dichlorobenzene	<b>1</b>		1	g	8260B	12.0ppb	-			
17. 1,2 Dichlorobenzene	✓		1	g	8260B	8.60ppb		· -		
18. 1,3 Dichlorobenzene	1		1	g	8260B	9.80ppb				
19. 1,1 Dichloroethane	✓		1	g	8260B	4.60ppb				
20. 1,2 Dichloroethane	1		1	g	8260B	11.0ppb				
21. 1,1 Dichloroethylene										
22. cis-1,2 Dichloro- ethylene	<b>✓</b>		1	g	8260B	23.0ppb				
23. Dichloromethane (Methylene Chloride)										
24. Tetrachloroethylene	✓		1	g	8260B	16ppb				

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method Used	Minimum Level (ML) of Test	Maximum daily	value	Avg. daily Valu	e
			(1 min- imum)	grab)	(method #)	Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	✓		1	g	8260B	11.0ppb				
26. 1,1,2 Trichloroethane	✓		1	g	8260B					
27. Trichloroethylene			1	g		10.0ppb				
28. Vinyl Chloride	✓		1	g	8260B	23.0ppb				
29. Acetone	<b>✓</b>		1	g	8260B	150ppb				
30. 1,4 Dioxane	<b>√</b>		1	g	624	642ppb				
31. Total Phenols		✓	1	g	625	2.47ppb	5.17	0.0002	5.17	0.0002
32. Pentachlorophenol	✓		1	g	625	3.53ppb	·			
33. Total Phthalates <sup>5</sup> (Phthalate esthers)	✓		1	g	625	0.55ррь				
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	✓		1	g	625	1.30ррь				
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)										
a. Benzo(a) Anthracene	✓		1	g	8270C	1.21ppb		_		
b. Benzo(a) Pyrene	✓		1	g	8270C	1.15ppb				
c. Benzo(b)Fluoranthene	✓		1	g	8270C	1.13ppb				
d. Benzo(k) Fluoranthene	<b>√</b>		1	g	8270C	1.09ppb	<del></del>	_		<del></del>
e. Chrysene	<b>√</b>		1	g	8270C	1.14ppb	<del>-</del>			

<sup>&</sup>lt;sup>5</sup>The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples	Type of Sample (e.g.,	Analytical Method Used	Minimum Level (ML) of	Maximum daily	value	Average daily v	alue /
			(1 min- imum)	grab)	(method #)	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	<b>✓</b>		1	g	8270C	1.15ppb				
g. Indeno(1,2,3-cd) Pyrene	1		1	g	8270C	1.15ppb				
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)			1	g	8270C					
h. Acenaphthene		✓	1	g	8270C	0.84ppb	1.05	0.00008	1.05	0.00008
i. Acenaphthylene	✓		1	g	8270C	0.91ppb				
j. Anthracene	✓		1	g	8270C	1.09ppb				
k. Benzo(ghi) Perylene	✓		1	g	8270C	1.21ppb				-
l. Fluoranthene	<b>1</b>		1	g	8270C	1.14ppb	-			
m. Fluorene	-	<b>√</b>	1	g	8270C	1.14ppb	2.78	0.0001	2.78	0.0001
n. Naphthalene-		✓	1	g	8270C	7.90ppb	329	0.012	329	0.012
o. Phenanthrene		<b>√</b>	1	g	8270C	0.99ppb	3.51	0.0001	3.51	0.0001
p. Pyrene	✓		1	g	8270C	1.18ppb				
37. Total Polychlorinated Biphenyls (PCBs)	<b>✓</b>		1	g	608	0.00011				
38. Antimony	✓		1	g	200.7	0.002				
39. Arsenic	✓		1	g	200.7	0.0034				
40. Cadmium	✓		1	g	200.7	0.00030		<u> </u>		
41. Chromium III		✓	1	g	200.7	0.0016	.0000 3	0.001	.0000 3	0.001
42. Chromium VI		-			···				*	

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min- imum)	Type of Sample (e.g., grab)	Analytical Method Used (method #)	Minimum Level (ML) of	Maximum daily value		Avg. daily value	
						Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
43. Copper		✓	1	g	200.7	0.0029	,000058	0.005	.000058	0.005
44. Lead		✓	1	g	200.7	0.0017	,000068	0.002	.000068	0.002
45. Mercury		✓	1	g	200.7	0.00004	.000-	,000003	000077	.00003
46. Nickel		✓	1	g	200.7	0.0017	.000068	0.002		0.002
47. Selenium	✓		1	g	200.7	0.0043				
48. Silver	✓		1	g	200.7	0.0010				
49. Zinc		<b>✓</b>	1	g	200.7	0.0044	.00011	0.004	.00011	0.004
50. Iron		✓	1	g	200.7	0.018	.0381	0.0014	10381	.0014
Other (describe):							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		•	

c) For discharges where metals are believed present, please fill out the following: Step 1: Do any of the metals in the influent have a reasonable potential to exceed the If yes, which metals? effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y \_ \_ N \_\_\_\_ Copper, lead, zinc, iron Step 2: For any metals which have reasonable potential to exceed the Appendix III limits, Look up the limit calculated at the corresponding dilution factor in calculate the dilution factor (DF) using the formula in Part I.A.3.c) (step 2) of the NOI Appendix IV. Do any of the metals in the influent have the potential to instructions or as determined by the State prior to the submission of this NOI. exceed the corresponding effluent limits in Appendix IV (i.e., is the What is the dilution factor for applicable metals? influent concentration above the limit set at the calculated dilution Metals: copper, lead, zinc, iron factor)? Y ✓ N If "Yes," list which metals: DF: Iron

4. Treatment system informa	tion. Please des	cribe the treatment	system using separ	ate sheets as necessar	y, including:					
a) A description of the treatm	ent system, inclu	iding a schematic of	f the proposed or e	xisting treatment syste	em:					
Groundwater will be pumped 2,000-pb. carbon units placed	from the excava	ntion to a 10K frac ta	ank. A transfer pur	mp will remove groun	ndwater from the fract	tank, pass it through a tic is attached.	bag filter, and (3)			
The system design will treat 75 gpm, we only need to operate a maximum of 50 gpm intermittently (when the frac tank is full), so the average is estimated at 20 pgm.										
b) Identify each applicable treatment unit (check all	Frac. tank	Air stripper	Oil/water sep	parator	Equalization tanks	Bag filter	GAC filter			
that apply):						✓	✓			
	Chlorination	Dechlorination	Other (please	describe):			— <u> </u>			
c) Proposed average and maximum flow rates (gallons per minute) for the discharge and the design flow rate(s) (gallons per minute) of the treatment system:  Average flow rate of discharge 20 Maximum flow rate of treatment system 50 Design flow rate of treatment system 75										
d) A description of chemical a	additives being u	sed or planned to be	e used (attach MSI	OS sheets):			<u></u> _			
none										
		<u> </u>								
5. Receiving surface water(s).	Please provide	information about tl	he receiving water	(s), using separate she	ets as necessary:					
a) Identify the discharge pathy	vay: D	Direct W	Within facility	Storm drain ✓	River/brook	Wetlands	Other (describe):			
b) Provide a narrative descript	ion of the discha	rge pathway, includ	ling the name(s) of	f the receiving waters:	:					
Discharge will be directed to M discharges to the Charles River	Manhole #173 per	er Map 11D from the	e Boston Water &	Sewer Commission, the	hrough the Stoney Bro	ook Conduit, to Outfal Harvard Bridge.	ll #23 which			

<ul> <li>c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:</li> <li>1. For multiple discharges, number the discharges sequentially.</li> <li>2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water</li> <li>The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.</li> </ul>
d) Provide the state water quality classification of the receiving water B,
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 22 cfs  Please attach any calculation sheets used to support stream flow and dilution calculations.
f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes_ \( \frac{1}{2} \) No If yes, for which pollutant(s)?  Online information indicatess that the Charles River, in years past, has had impaired water quality for a variety of pollutants, including oil and grease, and metals.  Is there a TMDL? Yes No_\( \frac{1}{2} \) If yes, for which pollutant(s)?
6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.
a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes No Lambda No Lamb
b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?  Yes No ✓ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes No ✓

,	7. Supplemental information. :
l	Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.
	According to information obtained from the City of Boston, the site has been a gasoline service station since the 1930's. According to the Boston Water & Sewer Commission, Manhole #173 discharges to the Stoney Brook Conduit. This is the only feasible pathway from this site to a surface water discharge. The closest surface water is located greater than one half mile to the north.
	This permit is for dewatering of an excavation to install gasoline storage tanks at the Getty station. The site is the subject of a release of gasoline that has been reported to the DEP. An Immediate Response Action Plan is currently in place and approved by DEP.
I	

**8. Signature Requirements:** The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

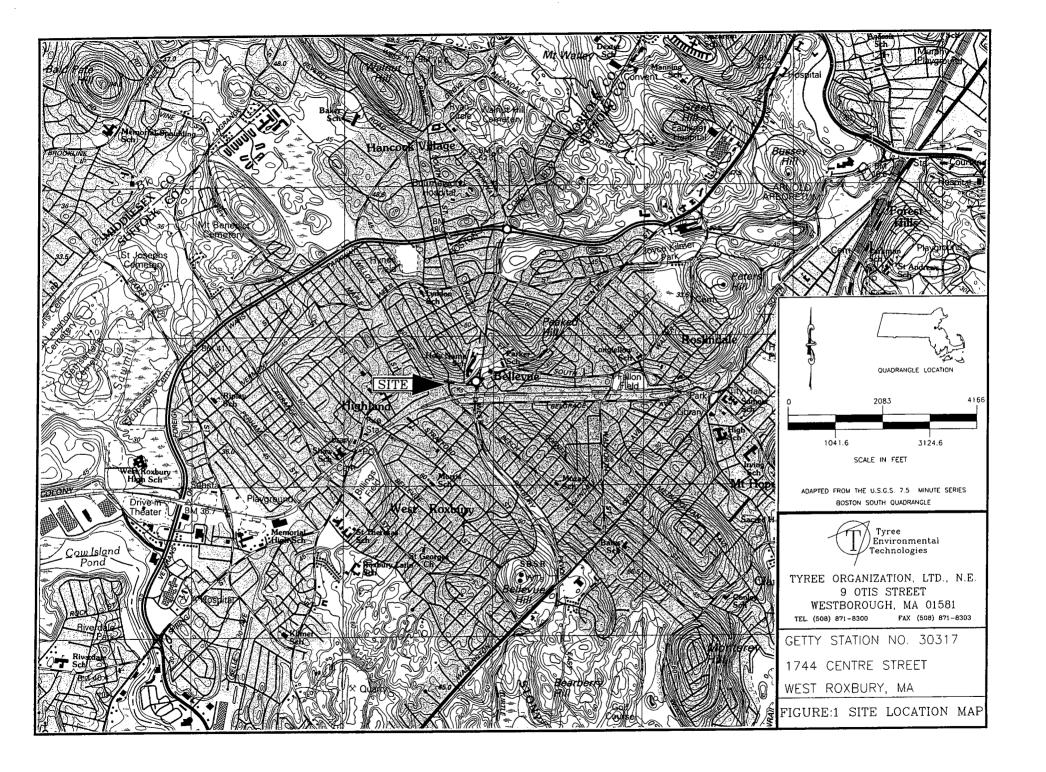
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

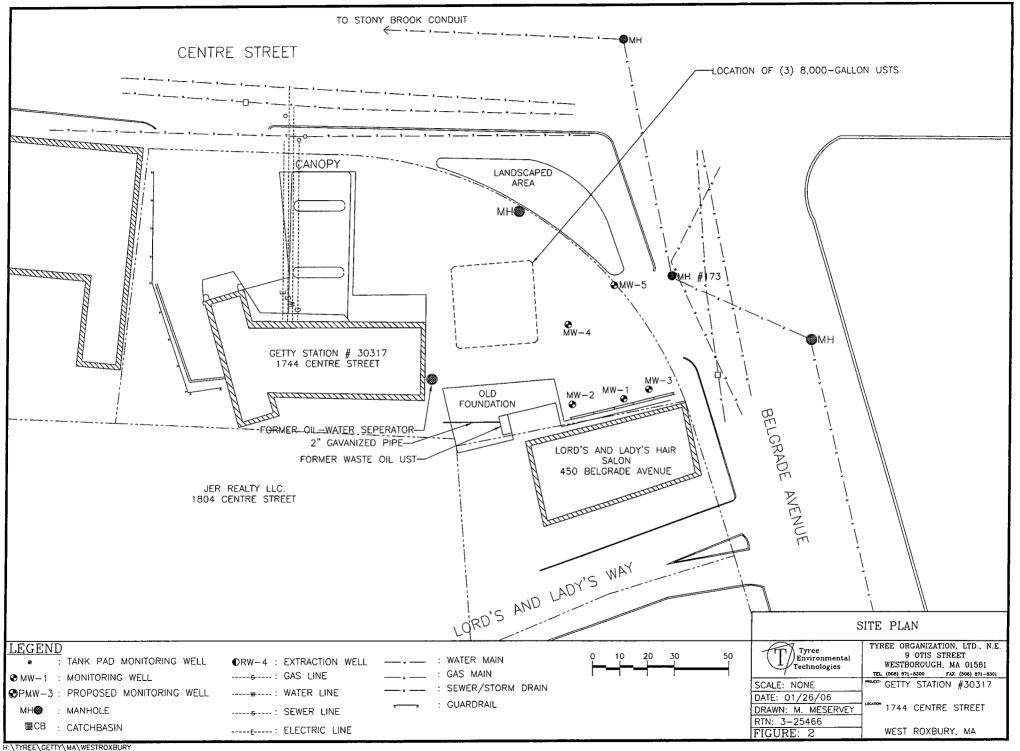
Facility/Site N	James Getts	/ Station	#30317

Operator signature: 🏾 🎜

Title: Senior Technician

Date: 8/14/06









	F	ACSIMILE TRANSMI'I	TAL SHEET	T # T WE
10: 16	rian Emon	FROM:	Tim R	•
COMPANY:	Tyree	DATE:	2/3/06	
FAX NUMBER:	508. <del>3</del> 71. 830		NO. OF PAGES INCLUDIN	IC COVER:
PHONE NUMBE			R'S REFERENCE NUMBER:	
RE:		YOUR	eference number:	
□ urgent	☐ FOR REVIEW	☐ please comment	□ please reply	□ please recycle
NOTES/COMME	NTS:		- The state of the	

Have A Great Day!!!

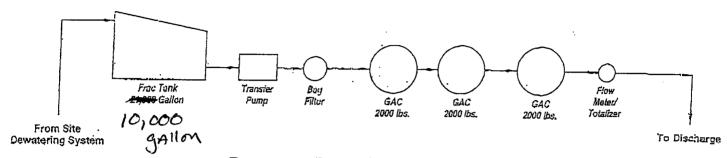
1164 Douglas Avenue, North Providence, RI 02904
401-353-3664 Fax 401-353-3696
www.servicetechine.com

#### Brain:

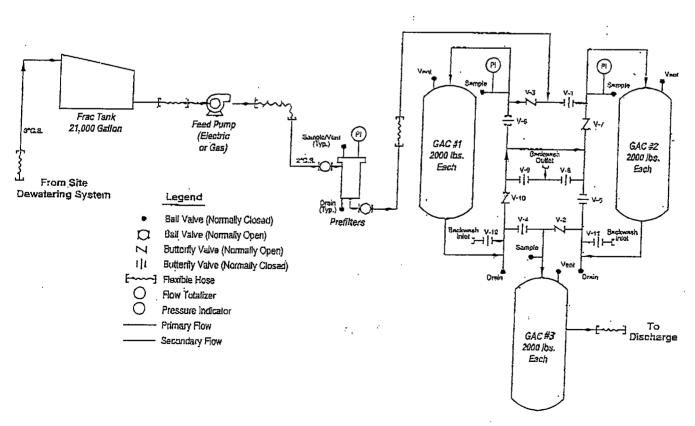
Here is a written description of the system we would propose. Attached is a diagram.

- Water will be pumped from the excavation via submersible pumps to a 10,000 gallon frac tank
- The 10,000 gallon frac tank will serve as a sedimentation and separation tank
- A centrifugal process pump will be utilized to move collected fluids through filtration components to discharge
- One bag filter will serve to remove particulates down to 25 microns. The bag filter vessel is size P2, 125 PSI.
- Following the bag filter, three liquid phase activated carbon vessels will be arranged in series configuration for VOC filtration. Each vessel will contain 2000 pounds LGAC. Vessels are rated for up to 100 GPM each, 75 PSI.
- A flow meter will be in-line following LGAC vessels for instant flow calculation. The flow meter is also a totalizer recoding total volume processed



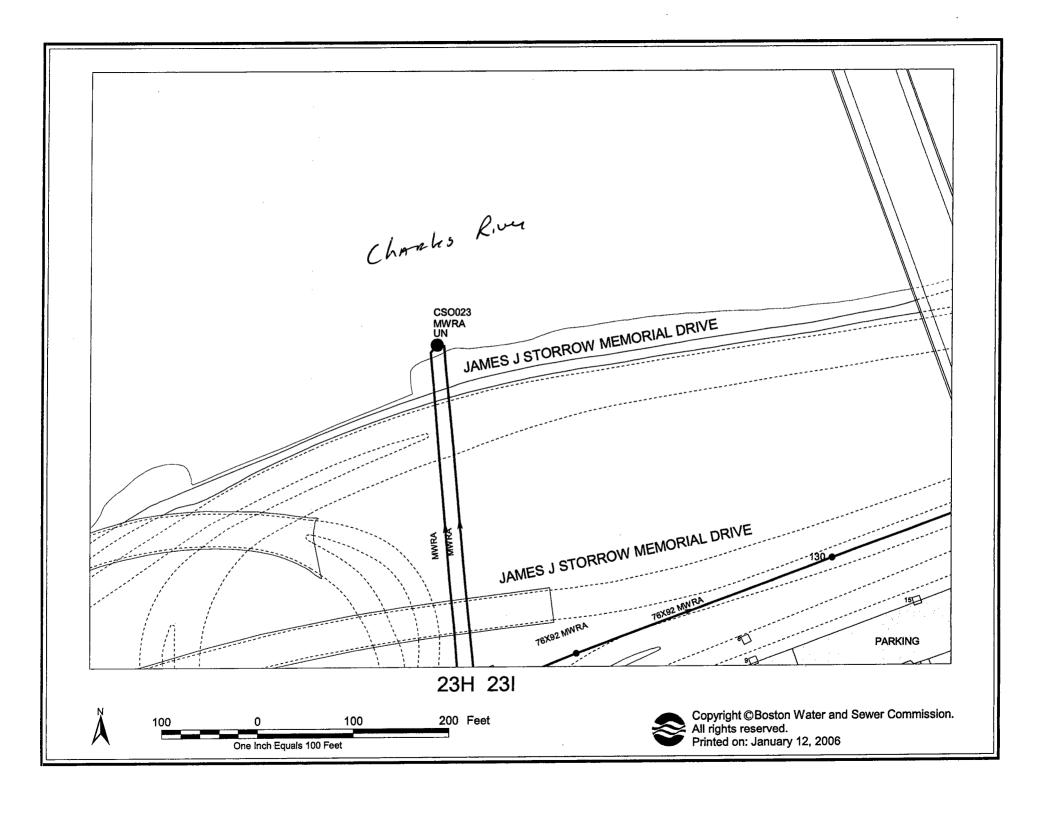


Process Flow Diagram
Dewatering Treatment System (Typical)

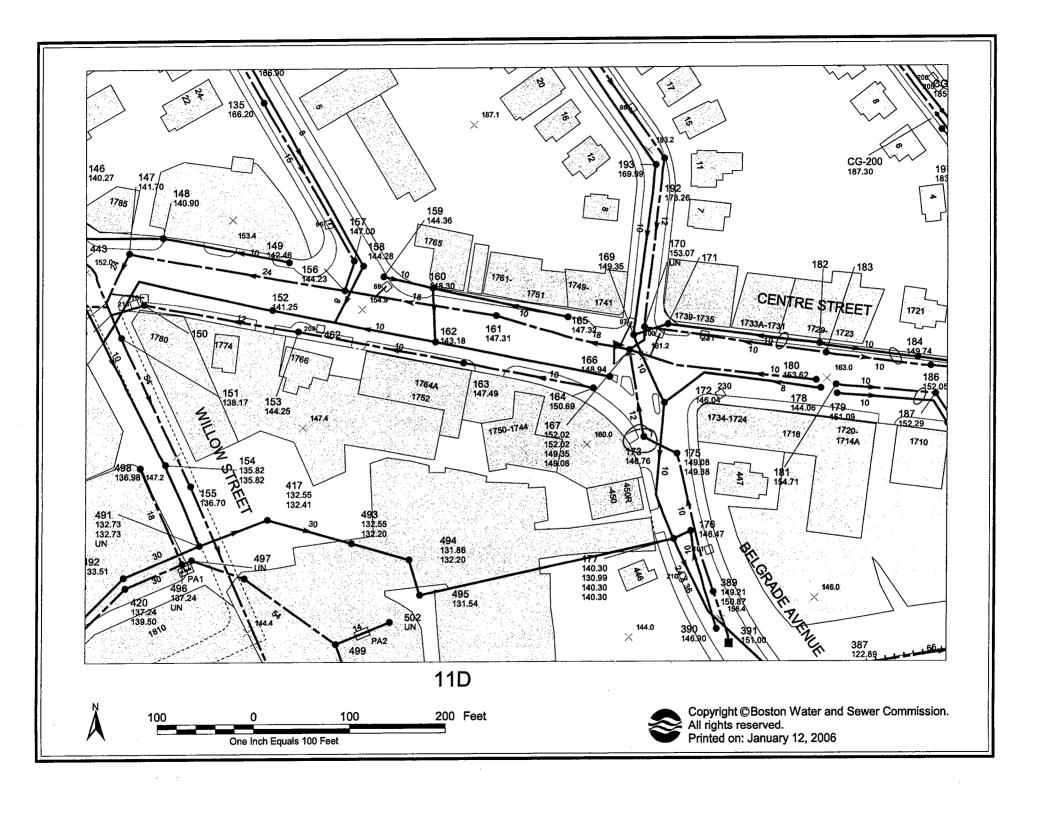


1164 Douglas Ävenue, North Providence, RI 02904 401-353-3664 Fax: 401-353-3696

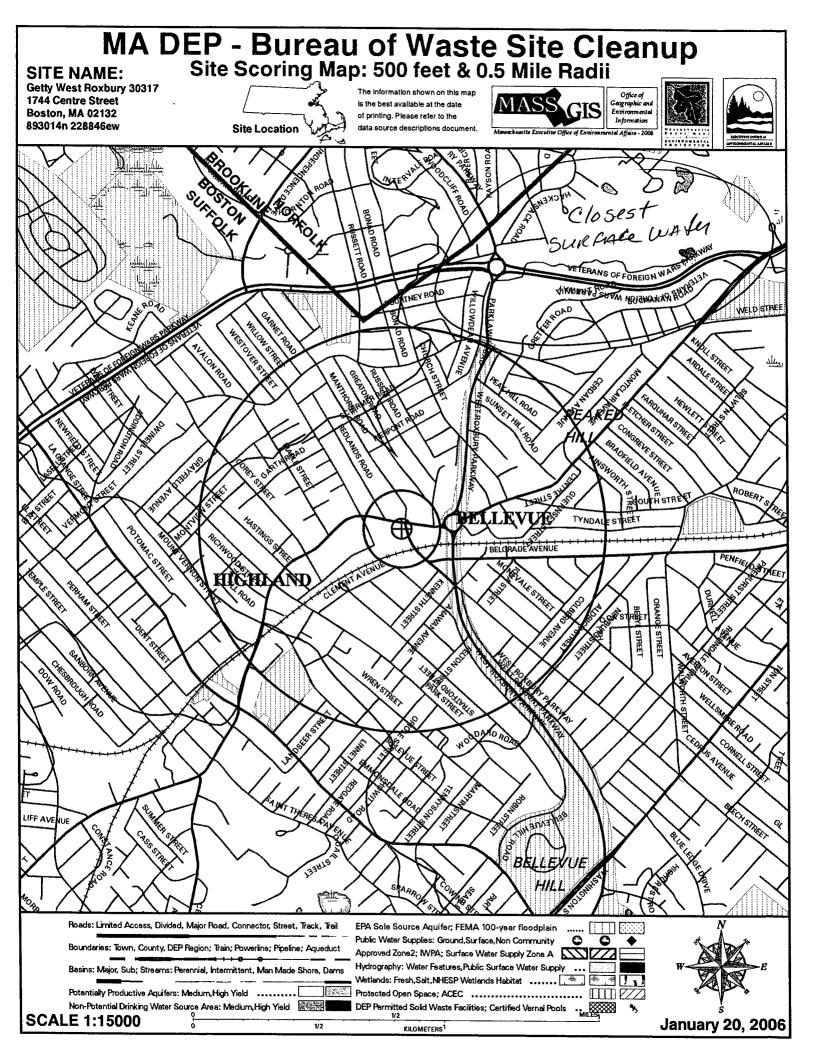














#### **Brian Emery - Re: RGP question**

From:

<papadopoulos.george@epamail.epa.gov>

To:

Brian Emery <BEmery@tyreeorg.com>

Date:

2/9/2006 10:55 AM

Subject: Re: RGP question

Brian, the 7Q10 of the Charles River close to the Kendall Station power plant was estimated at 22 cfs.

This should be a good number to use for your RGP NOI.

#### 

George Papadopoulos **USEPA** 1 Congress Street - Suite 1100 Mailcode CIP Boston, MA 02114-2023

Phone: (617) 918-1579

FAX: (617) 918-1505

**Brian Emery** <BEmery@tyreeorg

.com>

To

George 02/09/2006 10:18

Papadopoulos/R1/USEPA/US@EPA

AM

CC

Subject

**RGP** question

Hi, George,

one quick question, I have been searching all over for a 7Q10 for the Charles River, at at point just north of the Harvard Bridge.

Any suggestions?

Brian



208 Route 109, Farmingdale NY 11735 Phone - 631-249-1456 Fax - 631-249-8344

02/07/2006

#### Laboratory Identifier: 0602049

Custody Document: N4001 Received: 02/02/2006 10:15 Sampled by: Stephen Hebenstreit

Job Number: 67125

### Client: The Tyree Organization Dept. #20 (83337)

9 Otis Street Westborough, MA 01581-3311

#### Project: GETTY 30317

1744 Centre Street West Roxbury, MA

Manager: Brian Emery

Respectfully submitted,

Technical Director

NYS Lab ID # 10969 NJ Cert. # 73812 CT Cert. # PH0645 MA Cert. # NY061 PA Cert. # 68-535 NH Cert. # 252592-BA RI Cert. # 161

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- 0602049 - Page: 1 of 17

208 Route 109, Farmingdale NY 11735 Phone - 631-249-1456 Fax - 631-249-8344

02/07/2006

### Volatile Compounds by EPA Method 624

Sample: 0602049-1

Client Sample ID: MW-1

Matrix: Liquid

Type: Grab

Remarks: See Case Narrative Analyzed Date: 02/05/2006

Collected: 02/01/2006 08:00

### **Analytical Results**

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
123-91-1	1,4-Dioxane	D2716-2734	642	642	ppb	U

### **Surrogate Results**

Cas No	Analyte	File ID	% Recovery	QC Limits	Q
17060-07-0	1,2-DICHLOROETHANE-D4	D2716-2734	101.0 %	(80 - 125)	
460-00-4	4-BROMOFLUOROBENZENE	D2716-2734	99.3 %	(89 - 112)	
2037-26-5	TOLUENE-D8	D2716-2734	98.1 %	(85 - 122)	



- 0602049 - Page: 2 of 17

208 Route 109, Farmingdale NY 11735 Phone - 631-249-1456 Fax - 631-249-8344

02/07/2006

Collected: 02/01/2006 08:00

### **Volatile Compounds by EPA Method 8260B**

Sample: 0602049-1

Client Sample ID: MW-1

Type: Grab

Matrix: Liquid

Remarks: See Case Narrative Analyzed Date: 02/04/2006

### **Analytical Results**

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
71-55-6	1,1,1-Trichloroethane	C2072-3152	11.0	11.0	ppb	U
79-00-5	1,1,2-Trichloroethane	C2072-3152	10.0	10.0	ppb	U
75-34-3	1,1-Dichloroethane	C 2072-3152	4.60	4.60	ppb	U
106-93-4	1,2-Dibromoethane	C2072-3152	11.0	11.0	ppb	U
95-50-1	1,2-Dichlorobenzene	C2072-3152	8.60	8.60	ppb	Ū
107-06-2	1,2-Dichloroethane	C2072-3152	9.70	9.70	ppb	Ū
541-73-1	1,3-Dichlorobenzene	C2072-3152	9.80	9.80	ppb	U
106-46-7	1,4-Dichlorobenzene	C2072-3152	12.0	12.0	ppb	U
67-64-1	Acetone	C2072-3152	150	150	ppb	U
71-43-2	Benzene	C2072-3152	12.0	4950	ppb	
56-23-5	Carbon tetrachloride	C 2072-3152	8.10	8.10	ppb	U
1634-04-4	Methyl t-butyl ether	C2074-3201	75.0	19200	ppb	<del>                                     </del>
75-09-2	Methylene chloride	C2072-3152	11.0	11.0	ppb	U
91-20-3	Naphthalene	C2072-3152	17.0	417	ppb	Y
994-05-8	TAME	C 2072-3152	13.0	82.7	ppb	Y
75-65-0	Tertiary butyl alcohol	C 2072-3152	251	3330	ppb	Y
127-18-4	Tetrachloroethylene	C2072-3152	16.0	16.0	ppb	U
79-01-6	Trichloroethene	C2072-3152	20.0	20.0	ppb	U
75-01-4	Vinylchloride	C2072-3152	23.0	23.0	ppb	U
156-59-2	cis-1,2-Dichloroethene	C2072-3152	23.0	23.0	ppb	U

### **Surrogate Results**

Cas No	Analyte	File ID	% Recovery	QC Limits	Q
460-00-4	4-BROMOFLUOROBENZENE	C2072-3152	96.5 %	( 88 - 112)	
4774-33-8	DIBROMOFLUOROMETHANE	C2072-3152	101.0 %	(84 - 113)	<del> </del>
2037-26-5	TOLUENE-D8	C2072-3152	95.9 %	(85 - 117)	<del> </del>
460-00-4	4-BROMOFLUOROBENZENE	C2074-3201	96.6 %	( 88 - 112)	<del>                                     </del>
4774-33-8	DIBROMOFLUOROMETHANE	C2074-3201	102.0 %	(84 - 113)	1
2037-26-5	TOLUENE-D8	C2074-3201	99.9 %	(85 - 117)	1



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208 Route 109, Farmingdale NY 11735 Phone - 631-249-1456 Fax - 631-249-8344

02/07/2006

#### **BTEX - EPA 624**

Sample: 0602049-1

Client Sample ID: MW-1

Matrix: Liquid

Type: Grab

Remarks: See Case Narrative Analyzed Date: 02/06/2006 Collected: 02/01/2006 08:00

#### **Analytical Results**

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
71-43-2	Benzene	D2716-2734	27.0	4180	ppb	
108-88-3	Toluene	D2717-2768	280	39900	ppb	<del>                                     </del>
100-41-4	Ethylbenzene	D2716-2734	36.0	3660	ppb	1
1330-20-7	Xylenes	D2716-2734	87.0	26100	ppb	1
108-38-3	m+p-Xylene	D2716-2734	61.0	17600	ppb	1
95-47-6	o-Xylene	D2716-2734	26.0	8540	ppb	1

### **Surrogate Results**

Cas No	Analyte	File ID	% Recovery	QC Limits	Q
17060-07-0	1,2-DICHLOROETHANE-D4	D2716-2734	101.0 %	(80 - 125)	<del>                                     </del>
460-00-4	4-BROMOFLUOROBENZENE	D2716-2734	99.3 %	(89 - 112)	
2037-26-5	TOLUENE-D8	D2716-2734	98.1 %	( 85 - 122)	<u> </u>
17060-07-0	1,2-DICHLOROETHANE-D4	D2717-2768	106.0 %	(80 - 125)	1
460-00-4	4-BROMOFLUOROBENZENE	D2717-2768	98.8 %	( 89 - 112)	1
2037-26-5	TOLUENE-D8	D2717-2768	97.1 %	( 85 - 122)	



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02/07/2006

### **EPA 625 Compounds by Method EPA 625**

Sample: 0602049-1

Client Sample ID: MW-1 Collected: 02/01/2006 08:00

Matrix: Liquid Type: Grab

Remarks: See Case Narrative Analyzed Date: 02/04/2006 Preparation Date(s): 02/03/2006

### **Analytical Results**

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
62-75-9	N-Nitrosodimethylamine	B 1917-8640	0.60	0.60	ppb	U
108-95-2	Phenol	B 1917-8640	2.47	5.17	ppb	Y
111-44-4	bis(2-Chloroethyl)ether	B 1917-8640	0.94	0.94	ppb	U
95-57-8	2-Chlorophenol	B 1917-8640	1.43	1.43	ppb	U
541-73-1	1,3-Dichlorobenzene	B 1917-8640	0.84	0.84	ppb	U
106-46-7	1,4-Dichlorobenzene	B 1917-8640	0.85	0.85	ppb	U
95-50-1	1,2-Dichlorobenzene	B 1917-8640	0.84	0.84	ppb	U
108-60-1	bis(2-Chloroisopropyl)ether	B 1917-8640	0.84	0.84	ppb	U
621-64-7	N-Nitrosodi-n-propylamine	B 1917-8640	0.70	0.70	ppb	U
67-72-1	Hexachloroethane	B 1917-8640	0.87	0.87	ppb	U
98-95-3	Nitrobenzene	B 1917-8640	0.54	0.54	ppb	U
78-59-1	Isophorone	B 1917-8640	0.78	0.78	ppb	U
88-75-5	2-Nitrophenol	B 1917-8640	1.53	1.53	ppb	U
105-67-9	2,4-Dimethylphenol	B 1917-8640	0.65	45.6	ppb	
111-91-1	bis(2-Chloroethoxy)methane	B 1917-8640	0.77	0.77	ppb	U
120-83-2	2,4-Dichlorophenol	B 1917-8640	1.56	1.56	ppb	U
120-82-1	1,2,4-Trichlorobenzene	B 1917-8640	0.85	0.85	ppb	U
91-20-3	Naphthalene	A 1475-8467	7.90	329	ppb	В
87-68-3	Hexachlorobutadiene	B 1917-8640	0.98	0.98	ppb	U
59-50-7	4-Chloro-3-methylphenol	B 1917-8640	0.77	0.77	ppb	U
77-47-4	Hexachlorocyclopentadiene	B 1917-8640	1.78	1.78	ppb	υ
88-06-2	2,4,6-Trichlorophenol	B 1917-8640	1.34	1.34	ppb	U
91-58-7	2-Chloronaphthalene	B 1917-8640	0.83	0.83	ppb	U
131-11-3	Dimethylphthalate -	B 1917-8640	0.55	0.55	ppb	U
606-20-2	2,6-Dinitrotoluene	B 1917-8640	1.02	1.02	ppb	U
208-96-8	Acenaphthylene	B 1917-8640	0.91	0.91	ppb	U
83-32-9	Acenaphthene	B 1917-8640	0.84	1.05	ppb	Y
51-28-5	2,4-Dinitrophenol	B 1917-8640	3.90	3.90	ppb	Ū
100-02-7	4-Nitrophenol	B 1917-8640	5.09	5.09	ppb	U
121-14-2	2,4-Dinitrotoluene	B 1917-8640	0.92	0.92	ppb	U
84-66-2	Diethylphthalate _	B 1917-8640	0.72	0.33	ppb	J
86-73-7	Fluorene	B 1917-8640	1.14	2.78	ppb	Y
7005-72-3	4-Chlorophenyl phenyl ether	B 1917-8640	1.02		ppb	υ
534-52-1	4,6-Dinitro-2-methylphenol	B 1917-8640	3.79	<u> </u>	ppb	U



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02/07/2006

### **EPA 625 Compounds by Method EPA 625**

Sample: 0602049-1

Client Sample ID: MW-1 Collected: 02/01/2006 08:00

Matrix: Liquid Type: Grab

Remarks: See Case Narrative Analyzed Date: 02/04/2006 Preparation Date(s): 02/03/2006

### **Analytical Results**

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
86-30-6	N-Nitrosodiphenylamine	B 1917-8640	1.03	1.03	ppb	U
101-55-3	4-Bromophenyl phenyl ether	B 1917-8640	0.96	0.96	ppb	U
118-74-1	Hexachlorobenzene	B 1917-8640	0.94	0.94	ppb	U
87-86-5	Pentachlorophenol	B 1917-8640	3.53	3.53	ppb	U
85-01-8	Phenanthrene	B 1917-8640	0.99	3.51	ppb	Y
120-12-7	Anthracene	B 1917-8640	1.09	0.70	ppb	J
84-74-2	Di-n-butylphthalate →	B 1917-8640	1.10	0.35	ppb	J
206-44-0	Fluoranthene	B 1917-8640	1.16	0.46	ppb	J
92-87-5	Benzidine	B 1917-8640	18.3	18.3	ppb	U
129-00-0	Pyrene	B 1917-8640	1.18	0.67	ppb	J
85-68-7	Butylbenzylphthalate -	B 1917-8640	0.96	0.96	ppb	U
91-94-1	3,3'-Dichlorobenzidine	B 1917-8640	9.35	9.35	ppb	U
117-81-7	bis(2-Ethylhexyl)phthalate -	B 1917-8640	1.30	1.29	ppb	JB
56-55-3	Benzo(a)anthracene	B 1917-8640	1.21	1.21	ppb	U
218-01-9	Chrysene	B 1917-8640	1.14	1.14	ppb	U
117-84-0	Di-n-octylphthalate -	B 1917-8640	1.20	1.20	ppb	U
205-99-2	Benzo(b)fluoranthene	B 1917-8640	1.13	1.13	ppb	U
207-08-9	Benzo(k)fluoranthene	B 1917-8640	1.09	1.09	ppb	U
50-32-8	Benzo(a)pyrene	B 1917-8640	1.15	1.15	ppb	U
193-39-5	Indeno(1,2,3-cd)pyrene	B 1917-8640	1.15	1.15	ppb	U
53-70-3	Dibenz(a,h)anthracene	B 1917-8640	1.15	1.15	ppb	U
191-24-2	Benzo(g,h,i)perylene	B 1917-8640	1.21	1.21	ppb	U
86-74-8	Carbazole	B 1917-8640	0.96	0.96	ppb	U

### **Surrogate Results**

Cas No	Analyte	File ID	% Recovery	QC Limits	Q
118-76-6	2,4,6-TRIBROMOPHENOL	B1917-8640	86.7 %	(10-123)	
321-60-8	2-FLUOROBIPHENYL	B1917-8640	60.3 %	(43 - 116)	<del>                                     </del>
367-12-4	2-FLUOROPHENOL	B1917-8640	3.2 %	(21 - 110)	*
4165-60-0	NITROBENZENE-D5	B1917-8640	48.4 %	(35 - 114)	<del>                                     </del>
13127-88-3	PHENOL-D6	B1917-8640	19.9 %	(10 - 110)	1
1718-51-0	TERPHENYL-D14	B1917-8640	70.4 %	(33 - 141)	



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208 Route 109, Farmingdale NY 11735 Phone - 631-249-1456 Fax - 631-249-8344

02/07/2006

Collected: 02/01/2006 08:00

### Semivolatile PAH Compounds - EPA Method 8270C

Sample: 0602049-1

Client Sample ID: MW-1

Type: Grab

Matrix: Liquid

Remarks: See Case Narrative Analyzed Date: 02/04/2006 Preparation Date(s): 02/03/2006

**Analytical Results** 

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
83-32-9	Acenaphthene	B 1917-8640	0.84	1.05	ppb	Y
208-96-8	Acenaphthylene	B 1917-8640	0.91	0.91	ppb	U
120-12-7	Anthracene	B 1917-8640	1.09	0.70	ppb	J
56-55-3	Benzo(a)Anthracene	B 1917-8640	1.21	1.21	ppb	υ
50-32-8	Benzo(a)Pyrene	B 1917-8640	1.15	1.15	ppb	U
205-99-2	Benzo(b)Fluoranthene	B 1917-8640	1.13	1.13	ppb	U
191-24-2	Benzo(g,h,i)Perylene	B 1917-8640	1.21	1.21	ppb	U
207-08-9	Benzo(k)Fluoranthene	B 1917-8640	1.09	1.09	ppb	U
218-01-9	Chrysene	B 1917-8640	1.14	1.14	ppb	U
53-70-3	Dibenzo(a,h)Anthracene	B 1917-8640	1.15	1.15	ppb	Ū
206-44-0	Fluoranthene	B 1917-8640	1.16	0.46	ppb	J
86-73-7	Fluorene	B 1917-8640	1.14	2.78	ppb	Y
193-39-5	Indeno(1,2,3-cd)pyrene	B 1917-8640	1.15	1.15	ppb	U
91-20-3	Naphthalene	A 1475-8467	7.90	329	ppb	В
85-01-8	Phenanthrene	B 1917-8640	0.99	3.51	ppb	Y
129-00-0	Pyrene	B 1917-8640	1.18	0.67	ppb	J
91-57-6	2-Methylnaphthalene	A 1475-8467	9.70	146	ppb	BY

### **Surrogate Results**

Cas No	Analyte	File ID	% Recovery	QC Limits	Q
321-60-8	2-FLUOROBIPHENYL	B1917-8640	60.3 %	( 43 - 116)	1
4165-60-0	NITROBENZENE-D5	B1917-8640	48.4 %	(35 - 114)	
1718-51-0	TERPHENYL-D14	B1917-8640	70.4 %	( 33 - 141)	



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208 Route 109, Farmingdale NY 11735 Phone - 631-249-1456 Fax - 631-249-8344

02/07/2006

Collected: 02/01/2006 08:00

### PCB Aroclors by SW846 8082/EPA 608

Sample: 0602049-1

Client Sample ID: MW-1

Matrix: Liquid

Type: Grab

Remarks: Analyzed Date: 02/03/2006 Preparation Date(s): 02/03/2006

### **Analytical Results**

Cas No	Analyte	File ID	MDL	Concentration	Units	Q
12674-11-2	PCB 1016	G 1069-66	0.000080	0.000080	ppm	U
11104-28-2	PCB 1221	G 1069-66	0.000030	0.000030	ppm	U
11141-16-5	PCB 1232	G 1069-66	0.00011	0.00011	ppm	U
53469-21-9	PCB 1242	G 1069-66	0.00011	0.00011	ppm	Ťυ
12672-29-6	PCB 1248	G 1069-66	0.000090	0.000090	ppm	lυ
11097-69-1	PCB 1254	G 1069-66	0.000040	0.000040	ppm	<del>  U</del>
11096-82-5	PCB 1260	G 1069-66	0.000080	0.000080	ppm	Τυ

### **Surrogate Results**

Cas No	Analyte	File ID	% Recovery	QC Limits	Q
2051-24-3	DECACHLOROBIPHENYL	G1069-66	64.2 %	(30 - 150)	
877-09-8	TETRACHLORO M-XYLENE	G1069-66	68.1 %	(30 - 150)	



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208 Route 109, Farmingdale NY 11735 Phone - 631-249-1456 Fax - 631-249-8344

02/07/2006

Collected: 02/01/2006 08:00

### Metals by Method SW846 6010/EPA 200.7

Sample: 0602049-1

Client Sample ID: MW-1

Matrix: Liquid

Remarks: Analyzed Date: 02/04/2006 Preparation Date(s): 02/03/2006 Type: Grab

### **Analytical Results**

Cas No	Analyte	MDL	Concentration	Units	Q
7440-36-0	Antimony	0.0020	0.0020	ppm	U
7440-38-2	Arsenic	0.0034	0.0034	ppm	U
7440-43-9	Cadmium	0.00030	0.00030	ppm	U
7440-47-3	Chromium	0.0016	0.030	ppm	1
7440-50-8	Copper	0.0029	0.058	ppm	+
7439-89-6	Iron	0.018	38.1	ppm	+
7439-92-1	Lead	0.0017	0.068	ppm	+
7440-02-0	Nickel	0.00050	0.023	ppm	
7782-49-2	Selenium	0.0043	0.0043	ppm	1 0
7440-22-4	Silver	0.0010	0.0010	ppm	ΤŪ
7440-66-6	Zinc	0.0044	0.11	ppm	+



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02/07/2006

### Mercury by SW846 7470/7471/EPA 245.1

Sample: 0602049-1

Client Sample ID: MW-1

Type: Grab

Matrix: Liquid Remarks:

Analyzed Date: 02/02/2006 Preparation Date(s): 02/02/2006 Collected: 02/01/2006 08:00

### **Analytical Results**

Cas No	Analyte	MDL	Concentration	Units	Q
7439-97-6	Mercury	0.000014	0.000077	ppm	



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02/07/2006

#### **Total Chlorine**

Sample: 0602049-1

Client Sample ID: MW-1

Matrix: Liquid

Type: Grab

Collected: 02/01/2006 08:00

Remarks:

Analyzed Date: 02/02/2006

### **Analytical Results**

Cas No	Analyte	MDL	Result	Units	Q
7782-50-5	Chlorine	C	ND	ppm	



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02/07/2006

### Total Cyanide - EPA 335.2

Sample: 0602049-1

Client Sample ID: MW-1

Matrix: Liquid

Type: Grab

Collected: 02/01/2006 08:00

Remarks:

Analyzed Date: 02/03/2006

### **Analytical Results**

Cas No	Analyte	MDL	Result	Units	Q
57-12-5	Cyanide	0.010	0.010	mg/L	U



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208 Route 109, Farmingdale NY 11735 Phone - 631-249-1456 Fax - 631-249-8344

02/07/2006

### **EPA 1664 Non-Polar Material (TPH)**

Sample: 0602049-1

Client Sample ID: MW-1

Matrix: Liquid

Type: Grab

Collected: 02/01/2006 08:00

Remarks:

Analyzed Date: 02/06/2006

### **Analytical Results**

Cas No	Analyte	MDL	Result	Units	Q
	1664 Non-Polar Material (TPH)	3.05	4.15	mg/L	



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02/07/2006

Collected: 02/01/2006 08:00

### Total Suspended Solids - EPA 160.2/SM 2540D

Sample: 0602049-1

Client Sample ID: MW-1

Matrix: Liquid Remarks:

Type: Grab

Analyzed Date: 02/02/2006

### **Analytical Results**

Cas No	Analyte	MDL	Result	Units	Q
	Total Suspended Solids	4.58	32.0	mg/L	



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02/07/2006

#### **Case Narrative**

625:

Bis(2-ethylhexyl)phthalate, which was found in the blank associated with this sample at 0.47ppb, is a common laboratory contaminant.

Naphthalene was detected in the blank associated with sample at 0.44ppb which is below our detection/reporting limit.

The response for Bis (2-chloroisopropyl) ether in the continuing calibration has a 21% deviation from the average response of the initial calibration. All other compounds meet the +/- 20% criteria.

The acid surrogate 2-Fluorophenol did not pass QC requirements in the un-diluted sample. This is due to matrix interference in the form of high concentrations of non-target compounds. The surrogate recovery passes in the diluted extract at 25.3%.

#### PAHs:

Naphthalene and 2-Methylnaphthalene were detected in the blank associated with sample at 0.44ppb and 0.22ppb respectively. Both are below our detection/reporting limit.

#### **EPA 8260 VOLATILE ANALYSIS:**

The following compounds were calibrated at 25, 50, 100, 150 and 200 ppb levels in the initial calibration curve:

Acetone

Acetone

2-Butanone

4-Methyl-2-pentanone

2-Hexanone

M&P-Xylenes and 2-Chloroethylvinylether were calibrated at 10, 40, 100, 200 and 300 ppb levels.

Acrolein/Acrylonitrile were calibrated at 50,100,150,200 and 250 ppb levels. Tert Butyl Alcohol (TBA) was calibrated at 50,200,500,1000 and 1500 ppb levels.

All other compounds were calibrated at 5, 20, 50, 100 and 150 ppb levels.

#### **EPA 624 VOLATILE ANALYSIS:**

Acrolein and Acrylonitrile were calibrated at 25, 100, 250, 500 and 750 ppb levels in the Method 624 initial calibration curve.

MTBE, m&p-Xylenes and 2-Chloroethylvinyl ether were calibrated at 10, 40, 100, 200 and 300 ppb levels.

Tert butyl alcohol(TBA) and 1,4-Dioxane were calibrated at 50, 200, 500, 1000 and 1500 ppb levels.

Ethanol and tert-amyl alcohol were calibrated at 200,500,750,1000 and 1250 ppb levels.



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# Environmental Testing Laboratories, Inc. 208 Route 109, Farmingdale NY 11735

Phone - 631-249-1456 Fax - 631-249-8344

02/07/2006

#### **Case Narrative**

All other compounds were calibrated at 5, 20,50, 100 and 150 ppb levels.



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02/07/2006

#### **ORGANIC METHOD QUALIFIERS**

- Q Qualifier specified entries and their meanings are as follows:
  - U The analytical result is not detected above the Method Detection Limit (MDL).
     All MDL's are lower than the lowest calibration standard concentration.
  - J Indicates an estimated value. The concentration reported was detected below the Method Detection Limit (MDL).
  - Y The concentration reported was detected below the lowest calibration standard concentration.
  - B The analyte was found in the associated method blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
  - E The concentration of the analyte exceeded the calibration range of the instrument
  - D This flag indicates a system monitoring compound diluted out.

#### **INORGANIC METHOD QUALIFIERS**

- C (Concentration) qualifiers are as follows:
  - B Entered if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL).
  - U Entered when the analyte was analyzed for, but not detected above the Method Detection Limit (MDL) which is less than the lowest calibration standard concentration.
- Q Qualifier specific entries and their meanings are as follows:
  - E Reported value is estimated because of the presence of interferences.
- M (Method) qualifiers are as follows:
  - A Flame AA
  - AS Semi-automated Spectrophotometric
  - AV Automated Cold Vapor AA
  - C Manual Spectrophotometric
  - F Furnace AA
  - P ICP
  - T Titrimetric

#### **OTHER QUALIFIERS**

ND - Not Detected

WETU

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